

STATE OF DELAWARE

89 KINGS HIGHWAY
DOVER, DELAWARE 19901

TELEPHONE: (302) 739-9403
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DEPARTMENT OF NATURAL RESOURCES
AND ENVIRONMENTAL CONTROL
DIVISION OF WASTE AND HAZARDOUS SUBSTANCES
SOLID AND HAZARDOUS WASTE MANAGEMENT SECTION

May 8, 2018

Mr. Paul Lester, Vice President
R&M Recycling, LLC
242 N James Street, Suite 102
Newport, DE 19804

Subject: Recycling Permit #SW-18/01
Reference: R&M Recycling, LLC, File Code: 02.B

Dear Mr. Lester:

Enclosed is Recycling Permit #SW-18/01 ("Permit"), formerly known as Beneficial Use Determination ("BUD") Approval #41, issued by the Solid and Hazardous Waste Management Section ("SHWMS"). The Permit approves R&M Recycling, LLC, to accept and process pre- and post-consumer asphalt shingles to produce recycled ground asphalt feed stock for hot/cold mix asphalt plants or as road subbase material on Tax Parcel #s 1000100042, 1000100043, 1000100044, 1000100045, 1000100075 located at 924 Heald Street in Wilmington, Delaware. Permit #SW-18/01 is granted for three years and will expire on February 15, 2021.

If you have any questions concerning this Permit, please contact me at (302) 739-9403, option 8.

Sincerely,

A handwritten signature in blue ink, appearing to read "J. W. Sunde".

Jason W. Sunde
Environmental Program Manager
Solid and Hazardous Waste Management Section

Enclosure

JWS:MBCA:jmp
MBCA18009

Delaware's good nature depends on you!

RECYCLING PERMIT #SW-18/01

Effective Date: May 15, 2018
Original Issue Date: February 15, 2013
Expiration Date: May 15, 2021

Facility Name: R&M Recycling, LLC
Mailing Address: 924 Heald Street
Wilmington, DE 19801

Contact Person: Paul Lester
Phone Number: (302) 658-6524

Location of Approved Activity: 924 Heald Street
Wilmington, DE 19801
Tax Parcel Numbers: 1000100042, 1000100043, 1000100044,
1000100045, 1000100075

I. GENERAL CONDITIONS:

- A. In accordance with Delaware's *Regulations Governing Solid Waste* ("DRGSW"), Section 2.5.2, the Department of Natural Resources and Environmental Control ("the Department") issues Recycling Permit # SW-18/01 ("Permit") to R&M Recycling, LLC ("R&M") for accepting and processing pre- and post-consumer asphalt shingles to produce recycled ground asphalt feed stock for hot/cold mix asphalt plants or as road subbase material on Tax Parcel #s 1000100042, 1000100043, 1000100044, 1000100045, 1000100075 located at 924 Heald Street in Wilmington, Delaware (see attached site map).
- B. This Permit shall be conducted in accordance with the conditions herein and with the following documents, as submitted to the Department: (1) Recycling Permit Application dated October 2017 and associated documents; (2) Financial assurance: Performance Bond in the amount of \$416,000 dated September 14, 2012 and related documents; and (3) other procedures and policies specifically referenced in this Permit. Conditions of this Permit shall take precedence over any of the above listed documents. Failure to comply with any condition of this Permit or any provisions within the aforementioned documents is a violation of this Permit.
- C. R&M shall, upon request, present a copy of this Permit to any law enforcement officer or representative of the Department.
- D. R&M shall notify the Department's Solid and Hazardous Waste Management Section ("SHWMS") in writing within twenty-four (24) hours of any changes in the ownership, operators, name, or company officials.
- E. R&M shall notify the SHWMS at least thirty (30) days prior to the anticipated need to implement any change to waste characteristics, changes that will alter the beneficial use of the incoming waste material, or changes to processes, operations, or procedures

described in the Application documents referenced above in section I.B., or to this Permit. R&M shall not implement said changes unless and until they have been notified in writing from the SHWMS agreeing to the change(s).

- F. This Permit may be modified by the Department at any time, including additional limitations, requirements and/or special conditions. In the event the regulations governing activities authorized in this Permit are revised, this Permit may be modified.
- G. In the event that any condition of this Permit cannot be achieved or is violated, R&M shall immediately notify the SHWMS and take immediate action to correct the violation.

II. GENERAL OPERATING CONDITIONS:

- A. Operating hours:
R&M's operating hours are 7:00 am to 7:00 pm Monday through Saturday.
- B. Security:
Access to the R&M facility shall be controlled to prohibit the entry of unauthorized individuals.
- C. Access:
Representatives of the Department may, at any reasonable time, inspect this facility to verify compliance with the requirements of this Permit, the DRGSW and 7 Del. C. Chapter 60.
- D. Litter:
Litter shall be controlled and collected daily. This includes collection, removal and proper disposal of any solid waste not approved for processing. It also includes collection and proper disposal of any asphalt shingle feedstock, or outgoing recycled asphalt product, that falls along Heald Street and New Castle Avenue adjacent to the R&M site entrances. Good housekeeping practices throughout the site shall keep litter to a minimum. Litter shall be collected and placed in covered containers for disposal at an approved disposal facility.
- E. Dust control:
 - 1. A water truck and spray system, or sufficient alternative, shall be present at the facility while in operation to control any dusting that may occur from the receiving, processing, and storage areas.
 - 2. Prior to grinding, R&M shall ensure the shingles are wet to minimize the generation of dust during processing.
 - 3. All storage piles shall be wetted as needed to control any fugitive dust. The ground asphalt shingle product storage piles shall be sprayed down with water as needed to ensure that the outer layer of material is sufficiently wet to form an encrustation barrier over the stockpiles to limit potential fugitive dust.
 - 4. Trucks entering and leaving the facility with asphalt shingle waste and ground asphalt shingle product shall be tarped.
 - 5. Access roads shall be cleaned or wetted down.
- F. Odor control:
All asphalt shingles onsite shall be managed in order to prevent the presence of odors. If any odors from the asphalt shingles become an issue, R&M shall develop and implement an odor control plan.
- G. Vector control:
R&M shall monitor the facility for the presence of any rodents or other undesirable vectors daily. R&M shall document the presence of any undesirable vectors and legally eradicate them.

H. Fire safety:

All asphalt shingles onsite shall be managed in order to prevent the possibility of fires.

I. Employee Health and Safety:

Employees shall work under appropriate health and safety guidelines established by the Occupational Safety and Health Administration. Use of personal protective equipment shall be in accordance with 29 CFR Part 1910.132 as a minimum. First aid equipment shall be maintained and available onsite. Emergency telephone numbers of nearby ambulance, hospital, police and fire services shall be prominently displayed on-site. Sampling of post-consumer asphalt shingles for asbestos analysis shall only be performed by a qualified and trained individual consistent with applicable requirements specified by the *Regulations Governing the State of Delaware Contractor/Supervisor/Worker Asbestos Training and Certification Program and Training/Certification for Asbestos Professional Services*.

J. Equipment Usage, Inspection and Maintenance:

The asphalt shingle recycling facility equipment consists of a front-end loader, skid steer, and grinder. R&M will use a combination of this equipment and manual labor to process the incoming waste material and to handle the final ground shingle product. Processing equipment shall be selected and operated in compliance with the Department's Division of Air Quality regulations. R&M shall only use, or contract for use, grinders properly permitted by the Division of Air Quality ("DAQ") and secure any necessary DAQ permits in the future. All operating equipment shall be operated and inspected in accordance with the manufacturer's recommendation, permits, and this Permit. Equipment shall be maintained and operated in a manner that protects R&M employees, the public and the environment.

K. Training:

All employees who are to work in the receiving area shall have received initial training, within 180 days of hiring, in (1) Health and safety procedures, (2) Fire prevention and protection, and (3) Emergency first aid. Prior to working in the asphalt shingle operation, employees shall receive training in equipment operation conducted by the equipment manufacturer's representative or another person specifically knowledgeable in the operation of the equipment. Training shall include the manufacturer's operating and maintenance manual, operation instruction, equipment safety features, and hazards that might be encountered. Unless otherwise specified by a nationally recognized training provider (for example, the American Red Cross as a training provider for First Aid), training shall be required initially and annually thereafter.

L. Recordkeeping:

1. R&M shall maintain all training records on site for a minimum of three (3) years and these records shall be immediately provided to the Department upon request. These records shall document that required training has been provided to all employees who are to work in the asphalt shingle waste receiving and processing areas.
2. R&M shall record and maintain on site all data required by this Permit for a minimum of three (3) years and the records shall be immediately provided to the Department upon request, including:
 - a. Completed pre-approval/certification forms and related documents including sampling results provided by the generators/contractors
 - b. Records of any sampling and results of incoming post-consumer shingles by R&M

- c. Records of any shipments rejected and the purpose for the rejection
- d. Daily receipt logs for incoming shipments
- e. Records of shipments of processed shingles to end users
- f. Records of shipments of asbestos containing material, including the date and facility where it was sent
- g. Records of shipments of litter, incidental waste (III.A.8), and unacceptable shingle waste for proper disposal, including the date shipped and facility name and location where it was sent
- h. Documentation of all facility inspection reports
- i. Documentation of all incident reports

M. Reporting:

1. Quarterly:

The following information is required on a quarterly basis, to be received by the Department no later than the 15th (April 15th, July 15th, October 15th, January 15th) after every quarter:

- a. The amount of asphalt shingles accepted at the site
- b. The amount of asphalt shingles processed at the site
- c. The amount of unprocessed asphalt shingles stored on site
- d. The amount of processed asphalt shingles stored on site
- e. The amount of processed asphalt shingles sold
- f. The amount of litter, incidental waste (III.A.8), and unacceptable shingle waste sent for proper disposal, including the date shipped and facility name and location where it was sent
- g. A list of any shipments rejected and purpose for rejection
- h. A list of any sampling done by R&M in which asbestos containing material was found including where the asbestos containing material was disposed and the hauler name and address.

2. Annually:

- a. No later than February 1 of each calendar year, R&M shall provide an updated closure cost estimate, taking into account inflation. An updated letter from Diamond Materials Corporation shall also be provided, as long as they play a part in R&M's conceptual closure plan. If the cost estimate has increased over the amount of financial assurance provided, R&M shall accordingly provide increased financial assurance, along with an updated financial assurance mechanism, within six weeks of submission of the updated closure cost estimate.
- b. No later than February 1 of each calendar year, R&M shall submit an annual report for the previous calendar year which includes a summary of all of the information submitted in the quarterly reports. This report can be sent via email to the SHWMS project officer or a hard copy can be mailed to:

DNREC-SHWMS
89 Kings Highway
Dover, DE 19901

N. Authorized Waste:

1. Pre-consumer asphalt shingles (i.e. discards, cut-offs, off-specification shingles, etc.) generated in the manufacturing of new asphalt shingles
2. Post-consumer (tear off) asphalt shingle waste such as shingles that have previously been used as roofing cover material that result from roof repairs, removals or residential/commercial demolition operations

O. Prohibited Waste:

R&M shall exercise reasonable care to ascertain whether waste accepted by the facility is prohibited waste, and shall not accept the following prohibited waste, including, but not limited to:

1. Pre- and post-consumer asphalt shingles containing or suspected of containing asbestos
2. Fiber glass, insulation material, liquid materials, floor tiles, siding, cementitious shingles, and shake shingles
3. Construction and demolition waste, other than that which may be incidentally associated with post-consumer asphalt shingles
4. Incidental waste associated with incoming loads exceeding a total of 10 percent by weight or volume of the overall load
5. Plastics, glass, metal
6. Mixed municipal solid waste (trash/garbage), tires
7. Batteries, electronics
8. Sewage sludge and septage
9. Infectious and medical wastes, radioactive materials, universal wastes or hazardous wastes

Reasonable care shall include contacting the waste transporter or individual generator if a visual determination regarding the acceptability of the waste material cannot be made. Any loads that appear to contain any of the prohibited wastes listed above shall be rejected. These wastes shall be reloaded onto the truck and removed immediately. If these wastes are noticed after the hauler/customer has left the R&M facility, these wastes shall be immediately containerized and lawfully removed from the site within 72 hours of initial receipt.¹

P. Sampling and Analysis

All sampling shall be conducted according to the following:

1. Sampling of post-consumer asphalt shingles for asbestos analysis shall only be performed by a qualified and trained individual consistent with applicable requirements specified by the *Regulations Governing the State of Delaware Contractor/Supervisor/Worker Asbestos Training and Certification Program and Training/Certification for Asbestos Professional Services*.
2. All sampling and analysis shall be conducted according to the approved *Sampling and Analysis Information Sheet*.
3. Post-consumer asphalt shingles shall be analyzed and, if found to contain asbestos, hauled to an approved disposal site within 45 days of receipt by R&M.

¹ For information on the proper handling and disposal of sewage sludge and septage, please contact the Division of Water at (302) 739-9946. For information on the proper handling and disposal of suspected asbestos containing material, please contact the Division of Air Quality at (302) 324-2070. For information on the proper handling and disposal of all other listed prohibited wastes, please contact the SHWMS at (302) 739-9403 and select option 8.

III. RAW MATERIAL ACCEPTANCE, PROCESSING, AND STORAGE:

A. Procedures for Waste Acceptance

Waste acceptance and processing shall be conducted in accordance with R&M's submitted *Operations Plan*, DRGSW, Delaware Code, and the conditions below.

1. Prior to acceptance, all customers or contractors shall complete a Pre-Approval/Certification Form for each new shingle project that will be brought to the facility. The Pre-Approval/Certification Form shall provide information on the shingle material and its supplier and shall specifically require certification that the shingles are not classified as an Asbestos-Containing Waste Material (ACWM) as defined by the U.S. EPA under 40 CFR Part 61, Subpart M (National Emission Standard for Asbestos), including sample analysis for post-consumer asphalt shingles.
2. Post-consumer asphalt shingles shall be accepted only if the Pre-Approval/Certification Form is completed identifying the source of the asphalt shingles and certifying that the asphalt shingles have been sampled, analyzed and determined not to be asbestos-containing waste material. Documentation of the asbestos analytical results shall be included with the Pre-Approval/Certification Form.
3. Post-consumer asphalt shingles can be "conditionally accepted" if the Pre-Approval/Certification Form is completed identifying the source of the asphalt shingles and indicating that the asphalt shingles will be sampled and analyzed by R&M.
4. All incoming waste, rejected waste, outgoing waste, and outgoing products shall be weighed and recorded.
5. Upon arrival at the facility, all incoming loads of asphalt shingle waste, shall be inspected prior to, and after, unloading by a competent person, trained under OSHA 29 CFR 1926.1101(o)(4)(ii) or US EPA 40 CFR 763.93(a)(2), for suspected asphalt shingles that may contain asbestos, excess incidental waste or other prohibited wastes.
6. Any prohibited wastes listed in section II.O of this permit that are visible shall be rejected, reloaded onto the truck if appropriate, and removed immediately. If these wastes are noticed after the hauler/customer has left the R&M facility, these wastes shall be immediately containerized and lawfully removed from the site within 72 hours of initial receipt.¹
7. If suspected asbestos-containing material is noticed, the material must be handled in accordance with the Department's Air Regulations 1121 (Emission Standards for Hazardous Air Pollutants), Section 10. If R&M receives asbestos-containing material, they shall report to the Department by the following business day.
8. Incidental waste associated with incoming loads shall not exceed a total of 10 percent by weight or volume of the overall load. Should the incidental wastes be determined to be greater than 10 percent, the entire load shall be rejected and sent to a permitted solid waste facility for reprocessing, disposal, or recycling.
9. All asphalt shingles awaiting asbestos analytical results shall remain segregated, separately identifiable and wet or covered until a determination is made that they do not contain asbestos.

B. Procedures for Processing of Waste

1. Post-consumer shingles that have been shown to be free of asbestos shall be pre-processed prior to grinding. They shall be moved from the Unprocessed Material

Storage Area to the Processing Area where non-shingle materials such as wood, metal or other unprocessable materials can be removed from the shingles.

2. All litter, incidental waste (see condition III.A.8), or unprocessable shingles shall be placed into a single container and properly disposed of or recycled within 72 hours of becoming full or within 72 hours of a request by the Department.
3. Approved asphalt shingles shall be ground using a permitted grinder. The grinder shall be operated in a manner to minimize the generation of dust.

C. Procedures for Storage of Waste

1. The total amount of unprocessed asphalt shingles stored in the Unprocessed Material Storage Area shall not exceed 16,000 cubic yards (8,000 tons) of material.
2. Pre-consumer shingles and post-consumer shingles shall be stored in separate locations of the Unprocessed Material Storage Area.
3. Asphalt shingles, both ground and whole, shall be stored in such a manner as to prevent the emissions of fugitive dust and particulates.
4. Post-consumer shingles that will be sampled by R&M for analysis shall be staged and stockpiled into 50-150 cubic yard piles in the post-consumer shingles area of the Unprocessed Material Storage Area. Once these materials have been analyzed and confirmed as non-asbestos-containing shingles, the storage piles shall be consolidated as needed; however, pre-consumer shingles shall not be comingled with post-consumer shingles until just prior to processing unless segregation to meet the end use specifications is required.
5. Piles of asphalt shingles shall not exceed 20 feet in height. The Unprocessed Material Storage Area shall not exceed the boundaries outlined on the attached site map.

IV. **STORAGE OF PROCESSED ASPHALT SHINGLES:**

- A. The total amount of processed asphalt shingles stored in the Processed Material Storage Area shall not exceed 2,000 cubic yards (1,000 tons) of product.
- B. Piles of processed asphalt shingles shall have a maximum height of 20 feet.
- C. Additional storage of processed asphalt shingle product may be temporarily stored in the Unprocessed Storage Area as needed.
- D. Processed asphalt shingle product shall be identified as containing only pre-consumer shingles or both pre- and post-consumer shingles.

V. **BENEFICIAL USE AND APPLICATION:**

- A. R&M shall be responsible for ensuring that all necessary permits and approvals have been obtained prior to marketing the ground asphalt shingles.
- B. Ground asphalt shingles may be beneficially used as pavement or sub-base material for highways and roadways as well as hot/cold mix asphalt plant feedstock. Usage shall be in accordance with all applicable requirements, regulations, and laws.

VI. **CLOSURE:**

- A. R&M shall immediately notify the Department in writing the estimated date of facility closure and/or the date asphalt shingle wastes will no longer be accepted.

- B. R&M shall notify the Department in writing when closure activities are started, and again when closure is complete.
- C. Should R&M cease the processing of asphalt shingle waste into ground asphalt shingle product, within one hundred and eighty (180) days of cessation of operation, all asphalt shingle waste shall be recycled, re-used or properly disposed of off-site. All disposal, re-use, and recycling activities undertaken in this section must be conducted per the requirements of the DRGSW and Delaware Code
- D. During the 180 day closure period, the total amount of asphalt shingles stored on site, both ground and whole, shall not exceed a total of 9,000 tons.
- E. By the end of the 180-day period, all shingles, both ground and whole, shall be removed from the R&M site.

VI. ADDITIONAL CONDITIONS:

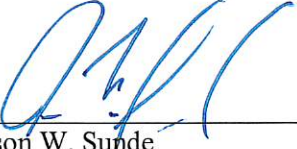
- A. If R&M desires to renew this Permit, R&M shall submit a new application no later than 180 days prior to the Permit expiration date. R&M may be required to submit additional documentation as needed at the Department's sole discretion.
- B. This Permit does not relieve R&M from complying with any other applicable Federal, State, or Local laws, regulations or ordinances.
- C. Any violation of any condition of this Permit, regulations promulgated by the Department, Secretary's Orders, or provision of 7 Del.C., Chapter 60, shall justify termination of this Permit, and implementation of appropriate enforcement action.

MODIFICATIONS AND RENEWALS:

May 20, 2013: Corrected to include permit signature. Expiration date: February 15, 2015

February 13, 2015: Renewed without modification. Expiration date: February 15, 2018

February 15, 2018: Extension granted to allow R&M time to finalize its permit renewal application. Expiration date: May 15, 2018



Jason W. Sunde
Environmental Program Manager
Solid and Hazardous Waste Management Section

5-8-18

Date

Site Map of R&M Recycling, LLC

